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10/674,621	09/30/2003	Gregory Ehlers	68,185-002	4196

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EXAMINER	
TRIEU, VAN THANH	

ART UNIT	PAPER NUMBER
2636	

DATE MAILED: 10/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/674,621	Applicant(s) EHLERS, GREGORY	
	Examiner Van T Trieu	Art Unit 2636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 September 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. *10/3/05*.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claim 1, 3-6, 8-16, 19, 20, 30, 31, 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gorman** [US 5,913,827] in view of **Kissel** [US 4,746,113] Regarding claim 1, the claimed control point (the microprocessor 72 provides the logic, signal recognition and identification, and instructions to the exercise parameter control unit 74 for controlling the exercise intensity in accordance with a desire exercise profile based on the target person and in response to the received heart rate conditions of the target person, see Figs. 7 and 8, col. 4, lines 55-59, col. 14, lines 24-32 and col. 16, lines 55-61); and the control point (the exercise parameter control 74, see Fig. 8, col. 16, lines 55-62 and col. 17, lines 42-47); but **Gorman** fails to disclose the remote node located with respect to the operator of the one of a machine and process for detecting a predetermined condition of the operator and automatically delivering a fault signal to the control point through a wireless communications channel in response to detecting the predetermined condition of the operator, the controller for controlling operation of the one of the machine or presence or absence of the fault signal. However, **Gorman** teaches that a person's wrist unit 14 contains a receiver 46 for receiving a person's

heart rate or ECG signals from the chest unit 12, which is analyzed by a signal evaluator 48 and to determine if any wireless transmission errors therein, correcting of the wireless transmission error signal, then automatically transmit the analyzed signal to a remote receiver 46 located at an exercise machine 70 via wireless communication. The microprocessor 72 of the exercise machine 70 will control to operate and adjust the intensity of the exercise machine 70 in response to the received signals from the wrist unit 14, see Figs. 4-8, col. 4, lines 17-67, col. 5, lines 1-33, col. 6, lines 36-45, col. 14, lines 23-32 and 60-64, col. 15, lines 30-67 and col. 18, lines 45-67. **Kissel** suggests that an automatically adjustable exercise equipment comprises a control circuit 39 such as microcomputer 44 for receiving a plurality of inputs such as hand operated switch 25, optical sensors 43 and pressure sensor 47. When the pressure exerted by the user/exerciser decreased to a point indicative of a momentary muscular failure of the user/exerciser. The microcomputer 44 automatically controls to decrease the weight being lift upon receiving the muscular failure signal from the pressure sensor 47 indicating muscular failure of the user/exerciser, see Figs. 1-7, abstract, col. 2, lines 55-67, col. 3, lines 10-17 and col. 5, lines 4-28. Therefore, it would have been obvious to one skill in the art to recognize that the heart rate or ECG signal detected from a user/exerciser of **Gorman** indicates of a physical failure signal such as the muscular failure signal of **Kissel** for automatically controlling and adjusting the operation of the exercise machine/equipment, because if the user/exerciser has a heart failure, stroke or collapse while exercising on the exercise equipment, then the heart rate sensor, ECG sensor or any other physiological sensors can detected of the physiological failure of the

user/exerciser for automatically controlling of the exercise equipment for preventing further dangerous to the user/exerciser.

Regarding claim 3 the claimed controller generates an alarm response to the signal (the microprocessor 72 detects a sequence of errors in the received data, it notifies the user via the console display 83, see Fig. 8, col. 18, lines 60-61).

Regarding claim 4, the claimed control point for detecting a presence of the remote note (the microprocessor 72 detects the presence of the wrist unit 14 within a desired distance, see col. 4, lines 35-41).

Regarding claim 5 the claimed the predetermined condition being an absence of the remote node, which reads upon the microprocessor 72 detects a sequence of errors in the received data, which includes of absence of the wrist unit 14 when the wrist unit 14 is not within a desired range, see Fig. 7, col. 4, lines 35-41, col. 11, lines 52-63, col. 12, lines 33-35).

Regarding claim 6 all the claimed subject matters are discussed between **Gorman** and **Kissel** in respect to claim 4 above, and including the predetermined distance, see col. 4, lines 35-41.

Regarding claim 8, the claimed predetermined condition being the presence of the remote node, which reads upon the microprocessor 72 detects the received data when the wrist unit is presence or within a desired range, see Figs. 7 and 8, col. 4, lines 35-41, col. 11, lines 52-63, col. 12, lines 33-35.

Regarding claim 9, all the claimed subject matters are discussed between **Gorman** and **Kissel** in respect to claims 1 and 8 above.

Regarding claim 10, all the claimed subject matters are discussed between **Gorman** and **Kissel** in respect to claims 1 and 8 above, and including the second node located respect to a second operator, which reads upon the second exerciser carries a wrist unit 14 having different ID code and personal profile, for use of the same exercise machine 70, see, col. 16, lines 27-32.

Regarding claim 11, the claimed predetermined conditions relate to health conditions of the operator (the heart rate, ECG signal and biomedical response of a user/exerciser, see Fig. 7, col. 4, lines 20-62).

Regarding claim 12, the claimed the predetermined condition is related to the consciousness of the operator, which reads upon the biomedical response of the user/exerciser regarding to the heart rate and ECG signal.

Regarding claim 13, the claimed the predetermined condition is related to the attentiveness of the operator, which reads upon the continuously monitoring exercise activities of the user/exerciser carrying the wrist unit 14.

Regarding claim 14, the claimed remote node is embodied in one of a watch (the wrist unit 14, see Fig. 7).

Regarding claim 15, the claimed remote node is embedded in a device worn or carried by a person (the chest unit 12 and/or the wrist unit 14).

Regarding claim 16, the claimed device operative to remotely control the one of a machine or process (the microprocessor 72 of the exercise machine controls the intensity of the machine in response to the received data from the wrist unit 14, see Figs. 7 and 8).

Regarding claim 19, the claimed remote node generates the signal at periodic times (the chest unit 12 and wrist unit 14 generates every digital pulse in pulse train 20 in the cycle of the encoded data signal, see Figs. 2 and 3A, col. 11, lines 8-16).

Regarding claim 20, the claimed remote nodes generates the signal in response to receiving a request signal from the control point (the user is asked to enter some information about the exercise, override the automatic profile and generate of new

biomedical information data to the microprocessor 72, see Fig. 8, col. 17, lines 62-67 and col. 18, lines 1-33).

Regarding claim 30, all the claimed subject matters are discussed between **Gorman** and **Kissel** in respect to claims 1 and 10 above.

Regarding claim 31, all the claimed subject matters are discussed between **Gorman** and **Kissel** in respect to claims 1 and 10 above.

Regarding claim 37, all the claimed subject matters are discussed between **Gorman** and **Kissel** in respect to claims 1 and 10 above.

Regarding claim 38, all the claimed subject matters are discussed between **Gorman** and **Kissel** in respect to claim 1 above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Gorman** and **Kissel** and further in view of **Wentworth** [US 6,529,131]

Regarding claim 17, **Gorman** fails to disclose the predetermined distance is programmable. However, **Gorman** teaches that the predetermined distance is programmable. However, Gorman discloses a programmable microprocessor 72 for receiving the detected data for controlling of the exercise machine 70, which is within a proximity distance from a wrist unit 14 worn by a user/exerciser, see Figs. 7 and 8, col. 4, lines 33-41 and col. 17, lines 13-20. **Wentworth** suggests that the apparatus for determining distance and location of a subordinate or wrist unit 62 relative to a master unit 10. The wrist unit 62 and master unit 10 have the same electronic circuitry including a GPS receiver 96, LCD display 98, RAM 102, programmable microprocessor 104 and RF transceiver 106. The microprocessor 104 is programmed with a predetermined distance for allowing communications between the wrist unit 62 and the master unit 10, see Figs. 1-4, col. 2, lines 9-31, col. 6, lines 5-9, col. 7, lines 22-35, col. 8, lines 44-67, col. 9, lines 1-45 and col. 10, lines 25-61. Therefore, it would have been obvious to one skill in the art at the time the invention was made to implement the programming proximity distance of **Wentworth** to the programmable microprocessor of **Gorman** and **Kissel** for providing flexibility to a user/exerciser to control their own exercise environment with continuously monitoring biomedical conditions to operate the exercise machine.

3. Claims 17, 18 and 21-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gorman** and **Kissel** and further in view of **Stubbs et al** [US 6,736,759]

Regarding claim 17, **Gorman** fails to disclose the device for communicating with an external system for monitoring a condition of the operator, and for reporting the condition to the external system. However, **Gorman** teaches that the chest unit 12 is wireless communicates with the wrist unit 14 and then wirelessly transmits the biomedical data to the exercise machine 70 for displaying and controlling the operation functions of the machine. An external memory unit 84 allows any piece of exercise equipment to be used by any individual. The user/exerciser can take his/her external memory unit 84 to any gym for entering a desired profile interacts with the microprocessor 72, see Figs. 4-8, col. 17, lines 53-61. **Stubbs et al** suggests that an exercise monitoring system includes an electronic position device 5, a physiological monitor 6 and a display unit 7. The display unit 7 is configured for linking to a personal computer PC 8 by a cable, infrared or other means. The data is stored in the PC 8 for later retrieval and analyzing, see Figs. 1-4, col. 3, lines 14-37, col. 7, lines 57-67 and col. 8, lines 1-5. Therefore, it would have been obvious to one skill in the art at the time the invention was made to substitute the wireless link PC of **Stubbs et al** for the external memory unit of **Gorman** and **Kissel** for use at any exercise equipment located at the Gym, Home or Hospital, and any biomedical data is recorded for later retrieval and analyzing by physician or doctor.

Regarding claim 18, all the claimed subject matters are discussed between **Gorman** and **Stubbs et al** in respect to claim 17 above, but **Gorman** fails to disclose the condition including a position. However, **Gorman** teaches that the personal monitor for

monitoring a biomedical condition of a user/exerciser located within a predetermined distance from the exercise machine 70, see Figs. 7 and 8, col. 4, lines 16-41. **Stubbs et al** suggests that the electronic position device 5 includes a GPS module 30 for tracking location of a user/exerciser along with other physiological data at any locations, see Figs. 1-3, col. 3, lines 1-37 and col. 6, lines 36-64. Therefore, it would have been obvious to one skill in the art at the time the invention was made to implement the GPS module of **Stubbs et al** to the personal monitor of **Gorman** and **Kissel** for tracking position and location of the user/exerciser at any place since the GPS for monitoring location is available to the market.

Regarding claim 21, all the claimed subject matters are discussed between **Gorman** and **Kissel** and **Stubbs et al** in respect to claims 18 and 20 above.

Regarding claim 22, all the claimed subject matters are discussed between **Gorman** and **Kissel** and **Stubbs et al** in respect to claims 1 and 17 above.

Regarding claim 23, all the claimed subject matters are discussed between **Gorman** and **Kissel** and **Stubbs et al** in respect to claims 1 and 18 above.

Regarding claim 24, all the claimed subject matters are discussed between **Gorman** and **Kissel** and **Stubbs et al** in respect to claims 3 and 23 above.

Regarding claim 25, all the claimed subject matters are discussed between **Gorman** and **Kissel** and **Stubbs et al** in respect to claims 1 and 18 above.

Regarding claim 26, all the claimed subject matters are discussed between **Gorman** and **Kissel** and **Stubbs et al** in respect to claims 3 and 23 above.

Regarding claim 27, all the claimed subject matters are discussed between **Gorman** and **Kissel** and **Stubbs et al** in respect to claims 15 and 21 above.

Regarding claim 28, all the claimed subject matters are discussed between **Gorman** and **Kissel** and **Stubbs et al** in respect to claim 21 above.

Regarding claim 29, all the claimed subject matters are discussed between **Gorman** and **Kissel** and **Stubbs et al** in respect to claim 28 above.

4. Claims 32-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gorman** and **Kissel** and further in view of **Hayday** [US 4,932,910]

Regarding claim 32, **Gorman** fails to disclose the control point being embodied in a recovery beacon. However, **Gorman** teaches that the personal monitoring comprises a RF data receiving 46 and a microprocessor 72 for receiving, controlling and instruction to the exercise parameter control unit 74 for controlling the exercise intensity in accordance with a desired exercise profile, see Fig. 8, col. 16, lines 55-62 and col. 17,

lines 42-47. **Hayday** suggests that an emergency location marker system 11 for locating and rescuing an individual or downed aircraft in the water, comprising a flotation and an emergency position-indicating radio beacon EPIRP 48 to provide an RF signal indicating the position of the emergency location marker system 11 to facilitate satellite tracking, see Figs. 1-3, col. 1, lines 12-19, col. 2, lines 31-53 and col. 8, lines 12-39. Therefore, it would have been obvious to one skill in the art at the time the invention was made to substitute the EPIRP of **Hayday** for the RF data receiving of **Gorman** and **Kissel** for tracking and recovering of individual or downed aircraft lost in the ocean since both use of radio frequency transmission for communication to locate the individual or downed aircraft.

Regarding claim 33, all the claimed subject matters are discussed between **Gorman** and **Kissel** and **Hayday** in respect to claim 32 above, wherein the recovery EPRIP is floatable.

Regarding claim 34, all the claimed subject matters are discussed between **Gorman** and **Kissel** and **Hayday** in respect to claim 32 above, wherein the recovery EPRIP is life boat beacon, see Figs. 1 and 2 of **Hayday**.

Regarding claim 35, all the claimed subject matters are discussed between **Gorman** and **Kissel** and **Hayday** in respect to claims 1 and 32 above, and the storing at last known position as a function of the transmitted position (the computer system 90 for

storing of emergency data information including map information, GPS validate reliability and historical database/data profile.

Regarding claim 36, all the claimed subject matters are discussed between **Gorman** and **Kissel** and **Hayday** in respect to claim 35 above.

Response to Arguments

5. Applicant's arguments filed on 28 September 2005 have been fully considered but they are not persuasive. Because,

Applicant's arguments:

(A) **Hoffman** does not disclose a system that includes a controller for controlling a machine or process. Nor does Hoffman disclose a controller that controls operation of the machine or process in response to the presence or absence of a fault signal generated automatically by a remote node located with respect to the operator in response to the detection of a predetermined condition.

Response to the arguments:

(A) A new reference of **Kissel** is combined with **Gorman** for supporting the physiological failure signals of a user/exerciser as well as the detected of user/exerciser biomedical condition, heart rate, ECG signals of **Gorman**, which are wirelessly received by the microprocessor for automatically control the operation and intensity of an exercise machine accordance thereto.

Conclusion

6. Examiner withdraws the final rejection as request by the applicant during the interview on 03 October 2005.

7. Any inquiry concerning this communication or earlier communications from examiner should be directed to primary examiner **Van Trieu** whose telephone number is (571) 272-2972. The examiner can normally be reached on Mon-Fri from 7:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. **Jeffery Hofsass** can be reached on (571) 272-2981.

Van Trieu
Primary Examiner
Date: 10/5/05